# City of Havre de Grace, Maryland

#### WATER AND SEWER RATE STUDY

**Preliminary Financial Plan Briefing Document** 

Date:

March 22, 2017

Subject:

Briefing Document - Preliminary Draft Financial Plan & Assumptions

**Purpose:** This document is intended to provide an overview of the preliminary financial plan results for the City of Havre de Grace's Water and Sewer utilities. An overview of the assumptions used to develop the respective financial plans for the period of FY 2017 – FY 2022 is presented followed by a summary of the results.

# Water and Sewer Rate Study

#### **Study Background**

The City of Havre de Grace ("City") provides water and wastewater utility services to residents and businesses within the City and to a few customers outside the City's jurisdiction. The water and sewer operations are supported by an enterprise fund, with revenues generated primarily from water and sewer user fees and charges, and system connection fees. The water/sewer fund has been facing an increasing funding deficit with revenues not adequate to meet all the revenue requirements, and significantly impacting the critical reinvestment in infrastructure. The funding deficit is due to a combination of factors including lower than projected operating and capital revenues due to decline in water consumption and a decrease in the number of new connections respectively.

To address the funding deficit and build financial stability of the City's water/sewer fund, the City engaged Black & Veatch to help develop a comprehensive water and sewer financial plan. In addition, the City requested the development of a water infrastructure renewal forecast to provide a sound basis for planning and implementing the rehabilitation and replacement of critical water distribution and treatment assets.

#### **Key Tasks**

To accomplish this, the following key tasks were envisioned:

Development of a 10-year forecast of the renewal and replacement needs for the key water infrastructure;

Alignment of the water capital improvement program (CIP) with the water infrastructure renewal forecast;

Development of a five-year financial plan;

Design of rate schedules and fees; and

Support City Staff in key stakeholder education efforts.

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# **Key Objectives**

The financial plan was developed based upon the following key objectives:

Finance the O&M requirements

Finance Capital Plan including Water Infrastructure R&R Forecast

Account for any general fund obligations of the water/sewer fund

Address funding deficit and plan for repayment of general fund borrowing

Consider future debt service payments in FY 2027 and FY 2028

Other objectives:

Achieve debt service coverage target of 1.20 by FY 2022

Build 60-day operating reserve by FY 2022

#### **Assumptions**

This section outlines the underlying assumptions used in developing the financial plan.

#### 1. Revenue Projections

- a. Projected water and sewer service revenues under existing rates reflect the current rate schedule as of the beginning of FY 2017.
- b. Water and Sewer billing units for each customer class are projected as follows:
  - i. FY 2016 water and sewer accounts, units and billed volumes based on FY 2016 billing records.
  - ii. FY 2017 FY 2022 water and sewer accounts reflect anticipated growth of 140 accounts over the next 6 years. 25 new accounts are added annually beginning in FY 17 through FY 21 with an additional 15 accounts anticipated in FY 22. All accounts are assumed to be 5/8 1 inch.
  - iii. FY 2017 FY 2022 average billed volume per account is assumed to remain flat (i.e. no growth) for projection purposes.

# c. Other Revenues:

- i. BOD and Industrial Pretreatment Charges are based upon the actual 3-year average.
- ii. Miscellaneous Revenues are projected to remain at the FY 17 budget level.
- iii. User Benefit Assessment Revenues projected based upon schedule as provided by City staff.
- iv. Revenues from Water Wholesale Agreement (i.e. County):
  - Assumes customer(s) will be in place when the agreement with the County is bought out in Q1 FY 2018.
  - Assumes the new Water Wholesale Agreement rate will be a minimum 1.92X the current purchase agreement rates. This is based upon estimated historical unit costs for total production (including City and County Volumes) costs net of Loop Meter Expenses, customer related distributed administrative expense and includes a mark-up of 10% for administration and 10% for profit.
  - Assumes 6 month lag in the implementation of new agreement (i.e. adjustment in FY 2018 is only 50% of anticipated increase in wholesale revenue).

- This equates to an approximate increase in wholesale revenues under existing rates of \$2.21M from FY 2018 to FY 2022.
- v. Debt Service Fee (DSF) Assumes existing DSF will be discontinued on June 30, 2017 and will be replaced by an infrastructure reinvestment fee, which (at a minimum) will provide revenues similar to the current DSF.
- vi. Interest Income is based upon an assumed interest income rate of 0.5% and calculated for the operating fund balance only.

# 2. Revenue Requirements

- a. Baseline Water & Sewer O&M expenses
  - i. Projected O&M based upon FY 2017 Budget
  - ii. Projected FY 2017 reflects 100% of budgeted O&M expenses.
  - iii. Annual increase in O&M projection purposes as follows:
    - 1. Chemicals 4%
    - 2. Contractual Services 3%
    - 3. Equipment 4%
    - 4. Gas/Oil/Fuel 3%
    - 5. General Inflation 3%
    - 6. Materials and Supplies 3%
    - 7. Personnel 2%
    - 8. Benefits 8%
    - 9. Power 0% in FY 18; 1% FY 19 to FY 21; 4% thereafter.
- b. Incremental Water and Sewer O&M expenses: N/A

#### 3. Capital Improvement Program (CIP)

- a. Two (2) CIP Scenarios were analyzed:
  - i. Baseline CIP as provided \$14.79M from FY 17 to FY 22.
  - ii. Baseline CIP plus additional funding to meet the projected level of investment needed to meet the Renewal and Replacement Profile \$15.8M from FY 17 to FY 22.

#### 4. Existing Debt

- a. Reflects the following Loans and Bonds:
  - i. MDE 2000 NR Loan #117
  - ii. Water Quality Bond [WQ06-346-13L] Wastewater Plant ENR Upgrade & Expansion Loan #138
  - iii. 2013 Refinancing of FHA 92-4 Sewer Facilities (Loan 109) Loan #142
  - iv. 2013 Refinancing of CDA 03A (Loan 119) Loan # 142
  - v. 2016 DHCD 2015 WTP Rehabilitation Loan #143

# 5. Proposed Debt

- a. Alternative capital program financing scenarios were analyzed assuming bond issuance(s) as needed to maintain total debt service below the City's maximum threshold and to minimize rate impacts. See "Financial Plan Scenarios" for additional discussion on Proposed Debt.
- b. General Obligation Bond Assumptions:
  - i. Term: 20 Years
  - ii. Rate: 4.0%

- iii. Issuance Expense: 1%
- iv. Timing: Assumed issuance during in August of each fiscal year.
- c. Proposed debt service based upon level principal and interest payment over the term of the bond.

#### 6. Other Expenses

- a. Transfers/General Fund Payback:
  - i. Additional borrowing from general fund in FY 2017 of \$455K to maintain positive cashflow. Assumes payback.
  - ii. Buy-out of County Water Agreement: Assumes transfer from general fund in FY 18 with payback to general fund over 4-year period beginning in FY 19.

#### 7. Fund Balances

- a. Starting fund balances utilized in the financial plan model are assumed to be as follows, as of 6/30/2016:
  - i. Construction Fund Balance = \$0
  - ii. **Operating Fund Balance** = \$0 (assuming additional general fund contribution to maintain positive fund balance see assumption #6 regarding other expenses)

#### 8. Revenue Adjustments and Target Financial Plan Metrics

- a. Adjust revenues annually to balance and meet financial plan targets. Provide for levelized rate increases as feasible.
- b. Rate increases are assumed to be effective as of July 1 for each fiscal year.
- c. Balance bond issuance(s) with available funding sources (including Grants, Pay-go/available cash from the Operating Fund, additional rate revenues/cash funding for CIP, etc.).
- d. **Target End of Year Operating Fund Balance** equivalent to a minimum of 60 days of annual O&M expense by the end of FY 22 (or sooner).
- e. Create a Rate Stabilization Fund (RSF) Establish a rate stabilization fund and achieve a minimum balance of \$1M to help mitigate significant volatility with respect to rate increases, beyond the five-year planning period. Note the City's outstanding debt service payments related to the wastewater treatment plant increase by \$1M in FY 2027 and FY 2028, driving the need to establish a RSF.
- f. Target Debt Service Coverage 120% for G.O. bonds.

#### **Water and Sewer Financial Plan Scenarios**

# **CIP Scenarios**

The following table provides a high-level summary of the costs associated with the CIP program utilized in developing the financial plan:

# **CIP Program**

Current 6-YR CIP as provided by City Staff plus additional funding to meet R&R profile reinvestment, which equates to an additional \$520K over the planning period.

CIP Program
All years presented
in FY 2017 cost levels
(not escalated)

Fiscal Year	Current CIP	Additional Water R&R	Total
2017	\$ 1.16M	\$ 0.00M	\$ 1.16M
2018	\$ 3.48M	\$ 0.06M	\$ 3.54M
2019	\$ 2.62M	\$ 0.04M	\$ 2.66M
2020	\$ 2.19M	\$ 0.06M	\$ 2.25M
2021	\$ 0.88M	\$ 0.24M	\$ 1.12M
2022	\$ 3.03M	\$ 0.12M	\$ 3.15M
Total	\$13.37M	\$ 0.52M	\$13.89M

# **Funding Scenarios**

The following table provides a high-level summary of the funding options evaluated and the various funding sources evaluated for the CIP program listed above. Scenario A is provided for information purposes only and meant to show the financial performance under existing rates and charges. Scenario B and C consider annual revenue adjustments and alternative CIP financing approaches as described below.

	Scenario A	Scenario B	Scenario C
	No increase in Base Service Charge and Volume Rates	Adjust Base Service Charge and Volume Rates	Adjust Base Service Charge and Volume Rates
Revenues Adjustment s	Wholesale Water Agreement - 1.92X current unit pricing effective by Dec. 30th, 2018	Wholesale Water Agreement - 1.92X current unit pricing effective by Dec. 30th, 2018	Wholesale Water Agreement - 1.92X current unit pricing effective by Dec. 30th, 2018
	DSF continues	DSF continues	DSF continues
	Bond funding based upon recent WTP bond issue only	Bond funding based upon recent WTP bond issue only	Bond funding based upon recent WTP bond issue <u>plus</u>
Bonds			Additional \$2.96M in to minimize rates and stay below City's debt service threshold
Pay-go	All remaining as Pay-go	All remaining as Pay-go	Balance as Pay-go

<u>Note</u>: While City Staff pursue grant opportunities each fiscal year to aid in funding critical CIP, previous grant awards have not been significant (i.e. less than \$60K) and were not considered as a reliable source of revenue for Financial Planning purposes. Should significant grant funding be secured then revenue adjustments contemplated herein could further be reduced.

# Water and Sewer Financial Plan Scenario Results

Combined water and sewer cash flow tables for all scenarios are provided in the Appendix. The table below provides a high-level overview and comparison of the three scenarios of the financial plan.

Fi	nancial Plan Scenario	А	В	С
<b>And Settle State</b>	FY 18	0%	16.5%	13%
	FY 19	0%	16.5%	13%
Revenue Increases	FY 20	0%	3%	3%
	FY 21	0%	3%	3%
	FY 22	0%	3%	3%
CIP Funding Sources (6-Ye	ear Total FY 17 to FY 22	2)		
	G.O Bonds	\$2.40M	\$2.40M	\$5.36M
Sources	<b>Grant Funding</b>	\$0	\$0	\$0
	PAY-GO	\$12.34M	\$12.34M	\$9.34M
Financial Plan Metrics				
Metrics	Target Days O&M Achieved	N/A	FY 20	FY 19
	Operating Fund Balance	(\$9.42M)	\$3.08M	\$2.52M
Metrics (ending FY 22)	Debt Service Coverage	139%	316%	257%
	Rate Stabilization Fund Balance	\$0M	\$1.0M	\$1.0M

#### **Estimated Rates**

Estimated rate schedules were developed based upon Scenario C, discussed above. Rates are adjusted across the meter base charge and volume rates for water and sewer to generate sufficient revenue under Scenario C. These rates are designed based on the existing rate structure and do not account for any change in the rate structure such as the introduction of an Asset Reinvestment Charge (ARC).

Note: Scenario C assumes the DSF would continue throughout the projection period. Any changes to the existing rate structure such as recovering a portion of the revenues via an asset reinvestment charge will correspondingly decrease the amount of revenue that needs to be recovered via the adjusted base charge and volume rates for water and sewer, respectively.

#### **Quarterly Base Service Charges**

	CURRENT		PROPOSED	
Meter Size (Inches)	FY 2017	FY 2018	FY 2019	FY 2020
Quarterly Base Service C	Charge (\$)			
5/8	18.75	21.25	24.00	24.75
3/4	18.75	21.25	24.00	24.75
1	18.75	21.25	24.00	24.75
1 1/2	79.50	90.00	101.75	104.75
2	128.50	145.25	164.25	169.25
3	208.00	235.25	265.75	273.75
4	336.50	380.25	429.75	442.75
6	544.50	615.50	695.50	716.25
8	880.75	995.25	1,124.75	1,158.50

#### **Volume Charges**

	CURRENT		PROPOSED					
	FY 2017	FY 2018	FY 2019	FY 2020				
Water Service (\$ per 1,0	000 gallons)							
Inside City	5.85	6.65	7.50	7.70				
Outside City	11.70	13.25	14.95	15.40				
Sewer Service (\$ per 1,000 gallons)								
Inside City	8.75	9.90	11.20	11.55				
Outside City	17.50	19.80	22.35	23.05				

Currently, the debt service fee generates roughly \$550,000 annually. To assure a more stable source of revenue to support the growing needs of R&R of the water and sewer infrastructure, we recommend replacing the existing limited purpose debt service fee with a more holistic ARC that is based on meter size. The magnitude of annual revenues to be generated by the ARC is defined taking in to consideration the often competing factors of customer affordability, revenue stability, and equity of cost recovery. The following section provides additional discussion on the ARC.

#### **Asset Reinvestment Charge Evaluation**

Per discussions with City Staff on February 22, 2017, a separate scenario was analyzed to review the potential impact of implementing an Asset Reinvestment Charge (ARC) for both the water and sewer systems. The intent of the ARC is to provide revenues dedicated to financing reinvestments in existing water and sewer assets ("the system"). Reinvestments in the system need to occur in a proactive manner in order to maintain system integrity and service reliability. These investments in the system assets are essentially fixed costs that have to be incurred regardless of the volume of water treated, stored, and distributed or

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wastewater collected, treated and disposed. Therefore, the ARC is designed as a quarterly fixed charge based on meter size. The capacity ratios of the meters were used in designing the meter size based ARC.

The total number of meters for the Test Year is projected on the basis of the number of equivalent 1" meters on a capacity ratio basis to reflect the capacity of the service line size. 1" meters were utilized based upon discussion with City Staff as all new and replacement meter size are installed at a minimum of 1" to allow for increased capacity and fire flow. The service line capacity ratios are used to translate the meters to equivalent 1" meters, as shown in the figure below.

**Equivalent Meters & Services Ratios** 

LINE	EQUIVALENT
SIZE	CAPACITY RATIOS
5/8"	2.5
3/4"	2.5
1"	2.5
1 1/4"	3.8
1 1/2"	5.0
2"	8.0
3"	16.0
4"	25.0
6"	50.0
8"	80.0

Currently, the revenue from the existing Debt Service Fee is primarily utilized to pay for debt related to wastewater treatment upgrades. However, the objective of the ARC is more holistic and it is intended to help fund future reinvestment into the system, not just existing debt service, as discussed in the following paragraph.

The City's current estimated annual depreciation is \$3 million. In order to replace those existing assets, an equivalent amount should be reinvested annually into the system in order to maintain the assets, system integrity and the associated service. For the purposes of this analysis, it was assumed that one-third of the annual depreciation or \$1 million should be generated via the asset reinvestment charge. This approach helps to balance revenue volatility associated with water consumption and wastewater service sales with the stability of a fixed charge. Based upon the Water Infrastructure Renewal Forecast, an average of \$500,000/year should be reinvested in the water system over a 10-year period. Note this is not based on the previously discussed 6-year CIP plan as developed by City Staff. This looks to the additional repair and replacement that should occur on a routine basis. This is primarily driven by costs related to replacement of the water distribution system. As the City has a similar level of amount wasterwater infrastructure, it was assumed that a similar amount should be generated for wastewater assets. Therefore, the ARC was estimated to recover approximately \$500,000 in costs related to water system reinvestments as well as a

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similar amount for the wastewater system (i.e. approximately \$1M per year). Note: The ARC would be considered a Capital Revenue; its impact is reflected in Scenario D in the Combined Water & Sewer Proforma Cashflow provided in the appendix on Line No. 5.

#### **ARC Phase-In**

With the implementation of the ARC, a typical residential customer would potentially be impacted in the short term. A strategy to mitigate this impact would be to phase-in the ARC fee over a four year period. In order to achieve this, revenues from water and sewer base fees and volume rates would need to be adjusted accordingly – resulting in increases similar to Scenario C. The ARC fee would be initially implemented at 62.5% of the charge, it would then increase 12.5% annually for the next 3 years. This was done to partially mitigate the impact of the loss of revenues due to the discontinuation of the DSF. While the fees have a different a basis, the revenues do influence the City's ability to meet all of its water and sewer commitments. The ARC revenues will be directed to reinvestment and replacement projections. The loss of the DSF will need to be made up by increase in the volume rates. The Arc Phase-in was analyzed as Scenario D. A comparison of the Scenarios C and D is presented in the following table.

	Financial Plan Scenario	<b>c</b> ()	D
	FY 18	13%	13%
	FY 19	13%	13%
Revenue Increases	FY 20	3%	3%
	FY 21	3% .	3%
	FY 22	3%	3%
CIP Funding Sources (6-Ye	ar Total FY 17 to FY 22)		
	G.O Bonds	\$5.36M	\$5.36M
Sources	Grant Funding	\$0	\$0
	PAY-GO	\$9.34M	\$9.34M
Financial Plan Metrics			
Metric	Target Days O&M Achieved	FY 19	FY 19
	<b>Operating Fund Balance</b>	\$2.52M	\$2.70M
Metrics (ending FY 22)	<b>Debt Service Coverage</b>	257%	260%
	Rate Stabilization Fund Balance	\$1.0M	\$1.0M

# **Estimated Rates with ARC**

Estimated rate schedules were developed based upon Scenario D with ARC implementation, discussed above. The resulting rate schedules for the meter base charge and volume rates for water and sewer services would be the same as those previously presented under Scenario C on Page 8. The phase-in for the ARC is presented in the following table.

# **Asset Reinvestment Charges**

		Draft ARC Schedule		
Meter Size (Inches)	FY 2018	FY 2019	FY 2020	FY 2021
5/8 - 1	27.75	33.50	39.00	44.50
1 1/2	55.50	66.75	77.75	89.00
2	89.00	106.75	124.50	142.25
3	177.75	213.25	248.75	284.25
4	277.50	333.00	388.50	444.00
6	555.00	666.00	777.00	888.00
8	888.00	1,065.75	1,243.25	1,421.00

# **Customer Bill Impacts**

The impact on customers is presented on the following pages. Estimated rate schedules were developed based upon Scenario D with ARC implementation, discussed above. For a typical residential customer (5/8-inch meter @ 15,000 gallons quarterly water use) would see a 13% increase in their total water and sewer bill.

Percent

Scenario D: Quarterly Bill Impact (FY 2018)

Line		Quarterly				Water							Sewer		
No.	No. Meter Size	Usage		Existing	Ь	Proposed	Inc	Increase	Percent		Existing		Proposed		Increase
	Inches	kgal													
Н	2/8	3	₩	36.30	8	41.20	↔	4.90	13.50%	₩	26.25	€5	29.70	↔	3.45
2	5/8	6	₩.	71.40	₩	81.10	↔	9.70	13.59%	↔	78.75	₩	89.10	↔	10.35
3	5/8	15	₩	106.50	₩	121.00	↔	14.50	13.62%	₩	131.25	↔	148.50	₩	17.25
4	5/8	20	₩	135.75	₩	154.25	↔	18.50	13.63%	₩	175.00	₩	198.00	↔	23.00
2	5/8	25	↔	165.00	↔	187.50	<del>\$</del>	22.50	13.64%	↔	218.75	↔	247.50	↔	28.75
9	3/4	30	₩	194.25	₩	220.75	↔	26.50	13.64%	↔	262.50	↔	297.00	↔	34.50
7	3/4	50	↔	311.25	₩	353.75	↔	42.50	13.65%	₩	437.50	₩	495.00	€	57,50
8		75	\$	457.50	₩	520.00	↔	62.50	13.66%	↔	656.25	↔	742.50	↔	86.25
6	1	100	₩	603.75	↔	686.25	↔	82.50	13.66%	↔	875.00	₩	990.00	↔	115.00
10	11/2	150	₩	957.00	₩	1,087.50	↔	130.50	13.64%	↔	1,312.50	₩	1,485.00	↔	172.50
11	2	200	↔	1,298.50	₩	1,475.25	↔	176.75	13.61%	₩	1,750.00	₩	1,980.00	↔	230.00
12	2	300	↔	1,883.50	₩	2,140.25	<del>\$</del>	256.75	13.63%	↔	2,625.00	₩	2,970.00	\$	345.00
13	3	200	↔	3,133.00	₩	3,560.25	<del>\$</del>	427.25	13.64%	₩	4,375.00	₩	4,950.00	\$	575.00
14	3	1,000	\$	6,058.00	₩	6,885.25	8	827.25	13.66%	₩	8,750.00	↔	9,900.00	\$ 1	\$ 1,150.00
15	4	2,000	₩	29,586.50	₩	33,630.25	\$ 4,	4,043.75	13.67%	₩	43,750.00	₩	49,500.00	\$	\$ 5,750.00
16	9	10,000	↔	59,044.50	₩	67,115.50	\$	8,071.00	13.67%	₩	87,500.00	₩	00'000'66	\$11	\$11,500.00
17	8	20,000	\$1	\$117,880.75	\$1	\$133,995.25	\$16,	\$16,114.50	13.67%	\$ 1	\$175,000.00	\$ 1	\$198,000.00	\$23	\$23,000.00

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Line		Quarterly								200
No.	No. Meter Size	Usage	Э	Existing	P.	Proposed	=	Increase	Percent	
	Inches	kgal		DSF		ARC				1
1	2/8	3	\$	25.00	₩.	27.75	↔	2.75	11%	1
2	5/8	6	\$	25.00	₩,	27.75	↔	2.75	11%	1
33	5/8	15	\$	25.00	↔	27.75	8	2.75	11%	ı
4	5/8	20	↔	25.00	₩	27.75	↔	2.75	11%	
2	5/8	25	↔	25.00	₩	27.75	↔	2.75	11%	1
9	3/4	30	↔	25.00	₩	27.75	↔	2.75	11%	
7	3/4	50	↔	30.00	↔	27.75	₩	(2.25)	%8-	
8	1	75	\$	30.00	₩	27.75	8	(2.25)	-8%	
6	1	100	↔	100.00	↔	27.75	↔	(72.25)	-72%	
10	11/2	150	₩.	100.00	₩	55.50	↔	(44.50)	-45%	1
11	2	200	↔	100.00	₩	89.00	↔	(11.00)	-11%	1
12	2	300	↔	100.00	₩	89.00	↔	(11.00)	-11%	
13	3	500	↔	100.00	₩.	177.75	↔	77.75	78%	
14	3	1,000	↔	250.00	₩	177.75	↔	(72.25)	-29%	
15	4	5,000	↔	250.00	₩	277.50	↔	27.50	11%	
16	9	10,000	\$	250.00	4	555.00	↔	305.00	122%	
17	8	20,000	↔	250.00	₩	888.00	↔	638.00	255%	

	Existing		Proposed	_	Increase	Percent
₩	87.55	↔	98.65	₩	11.10	12.68%
€9	175.15	₩	197.95	↔	22.80	13.02%
\$	262.75	₩	297.25	↔	34.50	13.13%
\$	335.75	₩	380.00	₩	44.25	13.18%
₩	408.75	₩,	462.75	↔	54.00	13.21%
5	481.75	₩	545.50	↔	63.75	13.23%
€9	778.75	₩	876.50	₩	97.75	12.55%
\$	1,143.75	↔	1,290.25	↔	146.50	12.81%
<del>\$</del>	1,578.75	₩	1,704.00	↔	125.25	7.93%
\$	2,369.50	↔	2,628.00	₩	258.50	10.91%
<del>50</del>	3,148.50	↔	3,544.25	↔	395.75	12.57%
\$	4,608.50	₩	5,199.25	↔	590.75	12.82%
\$	7,608.00	↔	8,688.00	↔	1,080.00	14.20%
\$ 15	15,058.00	↔	16,963.00	↔	1,905.00	12.65%
\$ 73	73,586.50	₩	83,407.75	↔	9,821.25	13.35%
\$146	\$146,794.50	\$	\$166,670.50	\$1	\$19,876.00	13.54%
\$293	\$293,130.75	\$	\$332,883.25	\$3	\$39,752.50	13.56%

#### Recommendation

The Black & Veatch Team recommends that the City consider the implementation of Scenario D, as this scenario helps achieve the following: (i) mitigate the level of revenue increases needed from rates and charges; (ii) provide a more stable revenue source for water and sewer infrastructure R&R; and (iii) mitigate the magnitude of bill impact through phasing in of the ARC.

By approving the proposed financial plan along with the recommended rate schedules that include a dedicated asset renewal charge, paves the way for:

- Increased financial stability and resilience;
- Elimination of reliance upon the general fund to support water/sewer enterprise fund
- Accomplish repayment of previous loans from the General Fund;
- Effective financing of the Capital Program to address critical infrastructure needs based upon anticipated system service life;
- Establishing a minimum of 60 days of O&M reserve; and
- Positions the City to adequately fund future O&M and debt service costs.

# Appendix - Scenario Proforma Cashflow

# Water and Sewer Financial Plan Scenario Results

Combined water and sewer cash flow tables for Scenarios A, B, C and D are presented herein.

#### Financial Plan Notes:

#### Notes:

- a. Revenues from Base Charges and Volume Charges.
- b. Revenues from Capital Recovery Charge, User Benefit Fee and Debt Service Fee.
- c. Interest on projected average operating fund balance and interest earnings rate of 1.00%.
- d. Other Revenues includes Service Charge Turn-On/Off, Industrial Surcharge, and Other Revenues.
- e. Miscellaneous Revenues includes BOD Surcharge, Connectoin Fees, and Miscellaneous charges.
- f. Not Applicable
- g. Total Revenues (Line 10) less Total Revenue Requirements (Line 19).
- h. FY 2017 beginning balance assumed to be \$0.
- i. Not Applicable.
- j. Total Revenues (Line 10) less O&M Expense (Line 19).
- k. Interest on Construction Fund balance (Line 36).
- l. Revenue Available for Coverage (Line 25) divided by Total Debt Service (Line 14).
- m. Bond issuance costs estimated as 1% of bond issuance.
- n. Interest on projected average construction fund balance and interest earnings rate of 1.00%.
- o. Projected capital program expenses including capital program budgeted Paygo.
- p. New Sources of Funds (Line 33) plus Existing Sources of Funds (Line 37) less Capital Program expenses (Line 39).
- q. End of year balance sufficient to provide funding prior to the subsequent year proposed bond issue plus an additional 2 months of capital program expenses.

Scenario A – Financial Performance under Existing Rates and Charges

Line							Fisca	Ye	ar		Nine Sales		
No.	Description		2017		2018		2019		2020	- A	2021		2022
	NED WATER & SEWER												
Operat	ing Fund Revenues:												
1	Proposed Revenue Increases				0.00%		0.00%		0.00%		0.00%		0.00%
	Revenue from Rates (a)												
2	Revenue from Existing Rates	\$	6,653,198	\$	6,925,567	\$	7,212,923	\$	7,272,661	\$	7,334,133	\$	7,387,107
3 4	Revenue Increases Total Revenue from Rates	\$	6 652 100	4	6025567	¢	7 21 2 022	•	7 272 661	¢.	7 224 122	•	7 207 107
			6,653,198	\$	6,925,567	\$	7,212,923	\$	7,272,661	\$	7,334,133	\$	7,387,107
5 6	Capital Revenue (b)	\$	1,134,606	\$	1,135,861 1,463	\$	1,131,829	\$	1,112,006	\$	1,091,076	\$	901,155
7	Interest Income (c) Other Revenues (d)	\$ \$	2,773 116,600	\$	116,600	\$	116,600		116,600		116,600		116,600
8	Miscellaneous Revenues (e)	\$	175,500	\$	175,500	\$	175,500		175,500		175,500		175,500
9	Intra-City Revenues	\$	455,000	\$	400,000	\$		********			-		-
10	Total Revenues	\$	8,537,677	\$	8,754,990	\$	8,636,852	\$	8,676,767	\$	8,717,309	\$	8,580,363
	Revenue Requirements:												
11	0&M Expenses	\$	4,903,400	\$	5,450,929	\$	5,210,783	\$	5,377,865	\$	5,552,611	\$	5,752,671
	Debt Service Requirements												
12	Existing GO Bonds		2,382,321		2,426,533		2,277,037		2,275,696		2,217,427		2,038,073
13	Proposed GO Bonds	-	-	-112	-	N. 100	-	0000		5000			(¥)
14	Total Debt Service	\$	2,382,321	\$	2,426,533	\$	2,277,037	\$	2,275,696	\$	2,217,427	\$	2,038,073
	Transfer to Construction												
15	Cash Funded Capital (Paygo) (f)		909,000		1,739,146		2,423,065		2,414,996		1,241,114		3,613,261
16 17	Total Transfer to Construction Transfer to General Fund		909,000		1,739,146		2,423,065 810,520		2,414,996 810,520		1,241,114 820,520		3,613,261 680,520
18	Transfer to General Fund Transfer to Rate Stabilization Fund				·50		-		010,320		- 020,320		-
19	Total Revenue Requirements	\$	8,194,721	\$	9,616,608	¢	10,721,404	\$	10,879,077	\$	9,831,673	\$	12,084,525
	APA												
20 21	Annual Net Balance (g) Beginning Balance (h)	\$	342,956 0	\$	(861,617) 342,956	\$	(2,084,553) (518,661)	\$	(2,202,310) (2,603,213)	\$	(1,114,364) (4,805,523)	\$	(3,504,162) (5,919,887)
22	Ending Fund Balance		342,956		(518,661)		(2,603,213)		(4,805,523)		(5,919,887)		(9,424,049)
23	Target Balance (60 Days 0&M)	\$ .	806,038	\$	896,043	\$	856,567	\$	884,033	\$	100000 Coleman Coleman	\$	945,645
24	Days Working Capital		26		(35)		(182)		(326)		(389)		(598)
	Revenue Available for Coverage:										is on woman. Caracas		
25	Net Revenue from Operations (j)	\$	3,634,277	\$	3,304,061	\$	3,426,069	\$	3,298,902	\$	3,164,697	\$	2,827,692
26	Other Interest Income (k)	_	17,856		15,919	-	10,733	-	9,478		3,162		8,475
27	Revenue Available for Coverage	\$	3,652,133	\$	3,319,980	\$	3,436,802	\$	3,308,380	\$	3,167,859	\$	2,836,167
	Debt Service Coverage												
28	Total Debt Service (l)		153%		137%		151%		145%		143%		139%
29	Minimum Required		120%		120%		120%		120%		120%		120%
	Rate Stabilization Fund												
30	End of Year Balance	\$	2	\$	2	\$	•	\$	•	\$		\$	-
Const	ruction Fund												
24	New Capital Funding Sources		2 100 000						1927				_
31 32	GO Bond Issuance GO Bond Issuance Costs (m)		2,400,000		0		0		0		0		0 0
33	Net GO Bond Proceeds	-	(24,000) 2,376,000		0	-	0		0		0		0
34	Federal Grants		0		0		0		0		0		0
35	Other Sources		0	5000	0		0		0		0		0
36	Total New Funding Sources	\$	2,376,000	\$	0	\$	0	\$	0	\$	0	\$	0
	Existing Source of Funds:												
37	Beginning of Year Balance	\$	384	\$		\$	352,522	\$	32,056	\$	41,534	\$	44,696
38 39	Transfer from Operations (Line 17) Interest Income (n)		909,000 17,856		1,739,146 15,919		2,423,065		2,414,996		1,241,114		3,613,261
40	Total Existing Source of Funds	\$	927,240	\$	3,895,304	\$	10,733 2,786,321	\$	9,478 2,456,530	\$	3,162 1,285,810	\$	8,475 3,666,432
	Application of Funds:		,		, ,,,		-,,	-	_,,			- 1	-,,
41	Major Capital Improvements (o)		1,163,000		3,542,782		2,754,265		2,414,996		1,241,114		3,613,261
42	Total Use of Funds		1,163,000		3,542,782		2,754,265		2,414,996		1,241,114		3,613,261
43	End of Year Balance (p)	\$	2,140,240	\$	352,522	\$	32,056	\$	41,534	\$	44,696	\$	53,171
44	Required Balance (q)		1,352,727		248,400		-		-		-		-

Scenario B - Financial Performance with Revenue Adjustments - No Additional Bond Financing

Line		6 8%	<b>对表示的</b> 特				Fisca	l Ye	ear			Ŋij.	
No.	Description		2017		2018		2019	I	2020		2021		2022
	NED WATER & SEWER												
Operat	ing Fund Revenues:												
1	Proposed Revenue Increases Revenue from Rates (a)				16.50%		16.50%	)	3.00%		3.00%		3.00%
2	Revenue from Existing Rates Revenue Increases	\$	6,653,198	\$	6,925,567 1,142,719	\$	7,212,923 2,576,636	\$	7,272,661 2,894,096	\$	7,334,133 3,226,139	\$	7,387,107 3,568,537
4	Total Revenue from Rates	\$	6,653,198	\$	8,068,285	\$	9,789,559	\$		\$		\$	10,955,644
5	Capital Revenue (b)	\$	1,134,606	\$	1,135,861	\$	1,131,829	\$	1,112,006	\$	1,091,076	\$	901,155
6 7	Interest Income (c) Other Revenues (d)	\$ \$	2,773 116,600	\$	4,852 116,600	\$	12,852		15,613		26,592		33,674
8	Miscellaneous Revenues (e)	\$	175,500	\$	175,500	\$	116,600 175,500		116,600 175,500		116,600 175,500		116,600 175,500
9	Intra-City Revenues	\$	455,000	\$	400,000	\$	-		-				-
10	Total Revenues	\$	8,537,677	\$	9,901,098	\$	11,226,340	\$	11,586,476	\$	11,970,040	\$	12,182,574
11	Revenue Requirements: O&M Expenses	\$	4,903,400	\$	5,450,929	\$	5,210,783	\$	5,377,865	\$	5,552,611	\$	5,752,671
12	Debt Service Requirements Existing GO Bonds		2,382,321		2,426,533		2,277,037		2,275,696		2,217,427		2,038,073
13 14	Proposed GO Bonds Total Debt Service	\$	2,382,321	\$	2,426,533	\$	2,277,037	\$	2,275,696	\$	2,217,427	\$	2,038,073
15	Transfer to Construction Cash Funded Capital (Paygo) (f)		909,000		1 720 146		2,423,065		2.414.996		1041114		2 ( 1 2 2 ( 1
16	Total Transfer to Construction		909,000		1,739,146 1,739,146		2,423,065		2,414,996		1,241,114 1,241,114		3,613,261 3,613,261
17	Transfer to General Fund		-		-		810,520		810,520		820,520		680,520
18	Transfer to Rate Stabilization Fund		-		-		330,000		330,000		340,000		**************************************
19	Total Revenue Requirements	\$	8,194,721	\$	9,616,608	\$	11,051,404	\$	11,209,077	\$	10,171,673	\$	12,084,525
20	Annual Net Balance (g)	\$	342,956	\$	284,491	\$	174,936	\$	377,399	\$	1,798,367	\$	98,049
21	Beginning Balance (h)		0		342,956		627,447	The same of	802,383	516	1,179,782	-	2,978,149
22	Ending Fund Balance		342,956		627,447		802,383	EE	1,179,782		2,978,149		3,076,199
23 24	Target Balance (60 Days 0&M) Days Working Capital	\$	806,038 <b>26</b>	\$	896,043 <b>42</b>	\$	856,567 <b>56</b>	\$	884,033 <b>80</b>	\$	912,758 <b>196</b>	\$	945,645 <b>195</b>
	Revenue Available for Coverage:												
25	Net Revenue from Operations (j)	\$	3,634,277	\$	4,450,169	\$	6,015,557	\$	6,208,611	\$	6,417,428	\$	6,429,903
26	Other Interest Income (k)		17,856		15,919		10,733		9,478		3,162		8,475
27	Revenue Available for Coverage  Debt Service Coverage	\$	3,652,133	\$	4,466,088	\$	6,026,290	\$	6,218,089	\$	6,420,590	\$	6,438,378
28	Total Debt Service (I)	18/29	153%	181	184%		265%	Mail:	273%		290%		316%
29	Minimum Required		120%		120%	yuas	120%	-	120%	ST PER	120%	Designation of the last	120%
	Rate Stabilization Fund												
30	End of Year Balance	\$		\$	=	\$	330,000	\$	660,000	\$	1,000,000	\$	1,000,000
Const	ruction Fund												
31	New Capital Funding Sources GO Bond Issuance		2,400,000		0		0		0		0		0
32	GO Bond Issuance Costs (m)		(24,000)		0		0		0		0		0
33	Net GO Bond Proceeds		2,376,000		0		0		0		0		0
34	Federal Grants		0		0		0		0		0		0
35 36	Other Sources Total New Funding Sources	S	2,376,000	\$	0	\$	0	\$	0	\$	0	\$	0
	Existing Source of Funds:		_,_,_,_,_							. *	v	*	Ü
37	Beginning of Year Balance	\$	384	\$	2,140,240	\$	352,522	\$	32,056	\$	41,534	\$	44,696
38	Transfer from Operations (Line 17)		909,000		1,739,146		2,423,065		2,414,996		1,241,114		3,613,261
39	Interest Income (n)	-	17,856		15,919		10,733		9,478		3,162	,	8,475
40	Total Existing Source of Funds	\$	927,240	\$	3,895,304	\$	2,786,321	\$	2,456,530	\$	1,285,810	\$	3,666,432
41	Application of Funds: Major Capital Improvements (o)		1 162 000		3,542,782		2754265		2.414.007		1 241 111		2712271
42	Total Use of Funds		1,163,000 1,163,000		3,542,782		2,754,265 2,754,265		2,414,996 2,414,996		1,241,114 1,241,114		3,613,261 3,613,261
43	End of Year Balance (p)	\$	2,140,240	\$	352,522	\$	32,056	\$	41,534	\$	44,696	\$	53,171
44	Required Balance (q)		1,352,727		248,400				**				

Scenario C – Financial Performance with Revenue Adjustments and Additional Bond Financing

Line		Fiscal Year									4-0143-1-45		
No.	Description		2017		2018		2019		2020		2021		2022
SHAROCOLOGICAL SHOP	NED WATER & SEWER												
Operat	ing Fund Revenues:												
1	Proposed Revenue Increases				13.00%		13.00%		3.00%		3.00%		3.00%
2	Revenue from Rates (a) Revenue from Existing Rates	\$	6,653,198	\$	6,925,567	\$	7,212,923	\$	7,272,661	\$	7,334,133	\$	7,387,107
3 4	Revenue Increases Total Revenue from Rates	\$	6,653,198	\$	900,324 7,825,891	\$	1,997,258 9,210,181	\$	2,292,394 9,565,055	\$	2,601,147 9,935,280	\$	2,920,146 10,307,254
5	Capital Revenue (b)	\$	1,134,606	\$	1,135,861	\$	1,131,829	\$	1,112,006	\$	1,091,076	\$	901,155
6	Interest Income (c)	\$	2,773	\$	3,634	\$	12,576		22,272		33,846		32,414
7	Other Revenues (d)	\$	116,600	\$	116,600	\$	116,600		116,600		116,600		116,600
8 9	Miscellaneous Revenues (e) Intra-City Revenues	\$ \$	175,500	\$	175,500	\$	175,500		175,500		175,500		175,500
10	Total Revenues	\$	455,000 8,537,677	\$	400,000 9,657,485	\$	10,646,686	\$	10,991,433	\$	11,352,302	\$	11,532,922
	Revenue Requirements:										11,002,002	~	11,503,722
11	0&M Expenses  Debt Service Requirements	\$	4,903,400	\$	5,450,929	\$	5,210,783	\$	5,377,865	\$	5,552,611	\$	5,752,671
12	Existing GO Bonds		2,382,321		2,426,533		2,277,037		2,275,696		2,217,427		2,038,073
13	Proposed GO Bonds		-,,		-,,		217,802		217,802		217,802		217,802
14	Total Debt Service	\$	2,382,321	\$	2,426,533	\$	2,494,839	\$	2,493,498	\$	2,435,229	\$	2,255,875
15	Transfer to Construction												
15 16	Cash Funded Capital (Paygo) (f) Total Transfer to Construction		909,000 909,000		1,739,146		1,193,485		647,475		1,241,114		3,613,261
17	Transfer to General Fund		-		1,739,146		1,193,485 810,520		647,475 810,520		1,241,114 820,520		3,613,261 680,520
18	Transfer to Rate Stabilization Fund				-		330,000		330,000		340,000		660,520
19	Total Revenue Requirements	\$	8,194,721	\$	9,616,608	\$	10,039,626	\$	9,659,358	\$	10,389,475	\$	12,302,327
20	Annual Net Balance (g)	\$	342,956	\$	40,878	\$	607,060	\$	1,332,075	\$	962,828	\$	(769,404)
21	Beginning Balance (h)		0		342,956	0.00	383,834		990,894		2,322,969		3,285,797
22	Ending Fund Balance		342,956		383,834		990,894		2,322,969		3,285,797		2,516,393
23	Target Balance (60 Days O&M)	\$	806,038	\$	896,043	\$	856,567	\$	884,033	\$	912,758	\$	945,645
24	Days Working Capital		26		26		69	E	158		216		160
	Revenue Available for Coverage:												
25	Net Revenue from Operations (j)	\$	3,634,277	\$	4,206,556	\$	5,435,903	\$	5,613,568	\$	5,799,691	\$	5,780,251
26	Other Interest Income (k)		17,856		43,007		29,171		10,144		3,016		8,328
27	Revenue Available for Coverage  Debt Service Coverage	\$	3,652,133	\$	4,249,564	\$	5,465,074	\$	5,623,711	\$	5,802,707	\$	5,788,580
28	Total Debt Service (I)		153%	th\s	175%		219%		226%	Gri	238%		257%
29	Minimum Required		120%		120%		120%		120%		120%		120%
	Rate Stabilization Fund												
30	End of Year Balance	\$	-	\$		\$	330,000	\$	660,000	\$	1,000,000	\$	1,000,000
Const	ruction Fund												
24	New Capital Funding Sources												
31	GO Bond Issuance		2,400,000		2,960,000		0		0		0		0
32	GO Bond Issuance Costs (m) Net GO Bond Proceeds	-	(24,000) 2,376,000		(29,600) 2,930,400		0		0		0		0
34	Federal Grants		2,370,000		2,930,400		0		0		0		0
35	Other Sources		0		0		0		0		0		0
36	Total New Funding Sources	\$	2,376,000	\$	2,930,400	\$	0	\$	0	\$	0	\$	0
	Existing Source of Funds:												
37	Beginning of Year Balance	\$	384	\$	2,140,240	\$	3,310,011	\$	1,778,402	\$	21,024	\$	24,040
38 39	Transfer from Operations (Line 17) Interest Income (n)		909,000		1,739,146		1,193,485		647,475		1,241,114		3,613,261
40	Total Existing Source of Funds	\$	17,856 927,240	\$	43,007 3,922,393	\$	29,171 4,532,667	\$	10,144 2,436,020	\$	3,016 1,265,154	\$	8,328
	Application of Funds:	4	727,240	J	3,744,373	Ф	4,332,007	Þ	2,730,020	Þ	1,203,134	٠	3,645,629
41	Major Capital Improvements (o)		1,163,000		3,542,782		2,754,265		2,414,996		1,241,114		3,613,261
42	Total Use of Funds		1,163,000		3,542,782		2,754,265		2,414,996		1,241,114		3,613,261
43	End of Year Balance (p)	\$	2,140,240	\$	3,310,011	\$	1,778,402	\$	21,024	\$	24,040	\$	32,368
44	Required Balance (q)		1,352,727		1,170,585		1,325,641		5				-

# Scenario D with ARC – Financial Performance with Revenue Adjustments, Additional Bond Financing and ARC Implementation

Line							Fisca	l Ye	ar				
No.	Description		2017		2018		2019		2020		2021		2022
***	NED WATER & SEWER												
Operati	ing Fund Revenues:												
1	Proposed Revenue Increases				13,00%		13.00%		3.00%		3.00%		3.00%
- 6	Revenue from Rates (a)				15,0070		13.00 /0		3.00 70		3.0070	\$	3,654,056
2	Revenue from Existing Rates	\$	6,653,198	\$	6,925,567	\$	7,212,923	\$	7,272,661	\$	7,334,133	\$	7,387,107
3	Revenue Increases		4		900,324		1,997,258		2,292,394		2,601,147	11.50	2,920,146
4	Total Revenue from Rates	\$	6,653,198	\$	7,825,891	\$	9,210,181	\$	9,565,055	\$	9,935,280	\$	10,307,254
5	Capital Revenue (b)	\$	1,134,606	\$	1,115,659	\$	1,143,032	\$	1,154,895	\$	1,165,927	\$	976.032
6	Interest Income (c)	\$	2,773	\$	3,739	\$	12,431	Ψ	22,397	φ	34,564	φ	33,891
7	Other Revenues (d)	\$	116,600	\$	116,600	\$	116,600		116,600		116,600		116,600
8	Miscellaneous Revenues (e)	\$	175,500	\$	175,500	\$	175,500		175,500		175,500		175,500
9	Intra-City Revenues	\$	455,000	\$	400,000	\$	-		(1.4)E		-		
10	Total Revenues	\$	8,537,677	\$	9,637,389	\$	10,657,744	\$	11,034,447	\$	11,427,872	\$	11,609,276
	Revenue Requirements:												
11	0&M Expenses	\$	4,903,400	\$	5,450,929	\$	5,210,783	\$	5,377,865	\$	5,552,611	\$	5,752,671
	5)		,		-,,-	0.00	0,220,.00	7	0,077,000	Ť	3,002,011	7	0,702,071
12	Debt Service Requirements Existing GO Bonds		2,382,321		2,426,533		2 277 027		2275 (0)		2 217 427		2.020.072
13	Proposed GO Bonds		2,382,321		2,420,533		2,277,037 217,802		2,275,696 217,802		2,217,427		2,038,073
14	Total Debt Service	\$	2,382,321	\$	2,426,533	\$	2,494,839	\$	2,493,498	\$	217,802 2,435,229	\$	217,802
**		¥	4,004,041	ę	4,140,333	φ	4,77,039	φ	4,773,470	Φ	4,433,449	4	2,255,875
1.5	Transfer to Construction		000 000		4.700.444								
15 16	Cash Funded Capital (Paygo) (f) Total Transfer to Construction		909,000		1,739,146		1,193,485		647,475		1,241,114		3,613,261
17	Transfer to General Fund		909,000		1,739,146		1,193,485		647,475 810,520		1,241,114		3,613,261
18	Transfer to Rate Stabilization Fund				-		810,520 330,000		330,000		820,520 340,000		680,520
19	Total Revenue Requirements	-		¢		c		4					
	* 10 mm	\$	8,194,721	\$	9,616,608		10,039,626	\$	9,659,358	\$	10,389,475	\$	12,302,327
20	Annual Net Balance (g)	\$	342,956	\$	20,781	\$		\$	1,375,089	\$	1,038,397	\$	(693,050)
21	Beginning Balance (h)		0		342,956		363,737		981,855		2,356,943		3,395,341
22	Ending Fund Balance		342,956		363,737		981,855		2,356,943		3,395,341		2,702,290
23	Target Balance (60 Days O&M)	\$-	806,038	\$	896,043	\$	856,567	\$	884,033	\$	912,758	\$	945,645
24	Days Working Capital		26		24	\$ 75	69		160		223		171
	Revenue Available for Coverage:												
25	Net Revenue from Operations (j)	\$	3,634,277	\$	4,186,460	\$	5,446,961	\$	5,656,582	\$	5,875,260	\$	5,856,605
26	Other Interest Income (k)		17,856		43,007		29,171		10,144		3,016		8,328
27	Revenue Available for Coverage	\$	3,652,133	\$	4,229,467	\$	5,476,131	\$	5,666,725	\$	5,878,276	\$	5,864,933
	Debt Service Coverage												
28	Total Debt Service (1)		153%		174%		219%		227%		241%		260%
29	Minimum Required		120%		120%	Sell Disse	120%		120%		120%		120%
	Rate Stabilization Fund												
30	End of Year Balance	\$	-	\$	1	\$	330,000	\$	660.000	\$	1,000,000	\$	1.000.000
Const	uction Fund						000,000		000,000	Ψ.	1,000,000	Ψ.	1,000,000
Consti	New Capital Funding Sources												
31	GO Bond Issuance		2,400,000		2.960.000		0		0		0		0
32	GO Bond Issuance Costs (m)		(24,000)		(29,600)		0		0		0		0
33	Net GO Bond Proceeds	-	2,376,000		2,930,400		0		0	-	0		0
34	Federal Grants		0		0		0		0		0		0
35	Other Sources		0		0		0		0		0		0
36	Total New Funding Sources	\$	2,376,000	\$	2,930,400	\$	0	\$	0	\$	0	\$	0
	Existing Source of Funds:												
37	Beginning of Year Balance	\$	384	\$	2,140,240	\$	3,310,011	\$	1,778,402	\$	21,024	\$	24,040
38	Transfer from Operations (Line 17)		909,000		1,739,146		1,193,485		647,475		1,241,114		3,613,261
39	Interest Income (n)		17,856		43,007		29,171		10,144		3,016		8,328
40	Total Existing Source of Funds	\$	927,240	\$	3,922,393	\$	4,532,667	\$	2,436,020	\$	1,265,154	\$	3,645,629
	Application of Funds:												
41	Major Capital Improvements (o)		1,163,000		3,542,782		2,754,265		2,414,996		1,241,114		3,613,261
42	Total Use of Funds		1,163,000		3,542,782		2,754,265		2,414,996		1,241,114		3,613,261
	End of Year Balance (p)	\$	2,140,240	\$		\$	1,778,402	\$	21,024	\$	24,040	\$	32,368
44	Required Balance (q)		1,352,727		1,170,585		1,325,641						